or 10/24/2005

App. Ser. No. 10/759,071 Atty. Dkt. No.: 029082.53055US

PATENT

IN THE CLAIMS:

Entry of the following amendments to the claims is respectfully requested:

- 1. (currently amended) A sterilization chamber for sterilizing objects, comprising a vacuum conduit connected to a vacuum pump, also comprising a conduit for a vapor composite consisting of water vapor and hydrogen peroxide vapor, and comprising a conduit for flood gas for application in a process in which the vapor composite is rapidly expanded without carrier gas flow into the sterilization chamber in which a vacuum prevails, wherein expanding and condensing the vapor compound takes place within several tenths of a second up to several seconds such that the vapor composite cools to below the hydrogen peroxide dew point and condenses on all accessible surfaces of the objects to be sterilized and on the surfaces of the sterilization chamber in the form of a condensation layer, the condensation layer being heated up considerably by the release of the evaporation enthalpy, followed by suctioning off after a predetermined reaction time by further evacuation of the sterilization chamber, wherein the surfaces of the sterilization chamber are made of poor heat-conducting, water-repellent material.
- 2. (previously presented) A sterilization chamber according to claim 1, wherein its surfaces have a coating of plastic, glass or closed-pore ceramic material.
- 3. (previously presented) A sterilization chamber for sterilizing an object with a vapor composite comprising water vapor and hydrogen peroxide vapor said sterilization chamber comprising: